subject to price cap and other incentive regulation. Klick Reply Decl •• 59-60. The well-established cost factor or "ACF" approach reflects the reality that competition and advances in technology lead to substantial reductions in operating expenses. Long historical experience confirms that those cost reductions will track expected reductions in investment from historical levels. *Id.*; Klick Decl. •• 111-121.

The Bells now contend that the Commission should *prohibit* state commissions from using this long-standard approach to expenses, because, according to the Bells, their own expenses cannot be expected to decline in tandem with reductions in investment relative to historical levels. The Bells present no actual evidence that this is so; indeed, as detailed below and in the declarations of Mr. Klick, the evidence is to the contrary. Moreover, the Bells' proposed alternative—using their actual, embedded operating expenses—is flatly insupportable. The Bells claim that embedded costs are appropriate because price cap regulation has made them efficient, but, as demonstrated above, that is plainly false. And even if price caps had made the ILECs efficient in the operation of their existing networks, embedded costs would still not be a reasonable proxy for efficient forward-looking costs, for the simple reason that the new modern equipment that an efficient entrant would deploy today would have substantially lower operating and maintenance costs.

1. Embedded Expenses Cannot Serve As a Proper Basis for Determining Forward-Looking Expenses.

The ILECs' current expenses cannot be presumed to approximate forward-looking costs. The ILECs' embedded expenses must be reduced by a cost factor, because an efficient, forward-looking network would consist of improved systems require less maintenance and labor than the ILECs' current networks. AT&T at 101. If anything, the use of an ACF may well *overstate* forward-looking costs, because such ratios do not fully capture the expense reducing effects of newer, state-of-the-art assets that are less costly to operate and maintain than the assets reflected

in the ILECs' embedded asset base. Klick Deel. •• 122-129; Klick Reply Deel. • 58. Indeed, the ILECs' own current cost-cutting efforts belie any notions that their current networks are optimally efficient. See Klick Deel. •• 123-125; Klick Reply Deel. •• 61-63. Thus, as the Virginia Arbitration Order recognized, the ILECs' existing expenses do not reflect those of an efficient carrier. Virginia Arbitration Order •• 136-160.33

The experience of other network industries is strong evidence that a provider of telecommunications services operating in a competitive or contestable market can reasonably be expected to achieve, on a long-run-basis, reductions in expenses comparable to those generated by applying the ACF. See Klick Decl. •• 111-121; Klick Reply Decl. • 59. But evidence from the telecommunications industry itself belies any notion that the ILECs' expenses will remain constant. See, e.g., Klick Reply Decl. •• 67-70 (describing downward trend in prices of state-of-the-art equipment). The Bells' own recent cost-cutting initiatives reflect a recognition that they can, and will, reduce their expenses substantially in the future. Technological improvements and advances in manufacturing processes, which are far less labor-intensive, make it even more likely that expenses will decrease substantially on a forward-looking basis. Klick Decl. •• 127-129; Klick Reply Decl. • 66.

The Bells fail to substantiate their claims. Although Verizon alleges that "incumbents' operating expenses have actually been increasing," it cites only its own data to support that claim—and those data reflect only a subset of Verizon's total expenses. *See* Verizon at 59 (describing increases in its network, marketing and corporate expenses and its general and administrative overhead). Even those data are entitled to no weight, for Verizon has identified neither the

Contrary to SBC's contention, basing forward-looking expenses on the ILEC's actual experience would not "climinate the need for the Commission to rely on speculation about forward-looking improvements or assumptions about what factors might influence expenses going forward." The ILECs' own cost data do not fully and accurately capture its "actual experience." See Klick Decl. •• 122-130.

source nor the basis of the data. *Id.* The data are also largely drawn from Verizon *retail* operations, which are not directly relevant to the wholesale expenses at issue in setting UNE prices.

And those data comparisons between 1991 and 2002 are, on their face, highly suspect. Verizon, for example, has made the opposite claims to the investing public, stating that its mergers with GTE and NYNEX would result in over \$1 billion savings in ongoing costs. Klick Reply Decl. •• 71-75. Verizon offers absolutely no basis for its assertion that labor costs and the expenses associated with "sophisticated digital equipment" will increase. *Id.* In fact, the evidence shows that, contrary to Verizon's assertions, improvements in new technology and more efficient procedures have enabled carriers to reduce the labor costs in such areas as the construction of outside plant. *Id.* •• 77-78. Furthermore, Verizon's argument regarding the complexity of the repair of "sophisticated digital equipment" is refuted by the above-described evidence that the newer-generation assets upon which the investments in a forward-looking network are based are more efficient, and *less* costly to maintain, than the assets reflected in Verizon's current investment base. ³⁴

⁴ Qwest's claim that state commissions and CLEC cost studies have recognized only a "small fraction" of its embedded expenses is based on bad data and is disingenuous. Qwest at 47. First, The accuracy of those data are highly questionable. A 1998 report by the accounting Safeguards Division of the Commission's Common Carrier Bureau found that 24.7 of the records that it sampled regarding Qwest's plant either were not found or could not be verified. The report further concluded that significant questions existed as to the valuation of then-US West's plant. and that the problems revealed in the audit were continuing problems that were unlikely to be corrected for some time. See Audit of the Continuing Property Records of US WEST Telephone Operating Companies As of June 30, 1997, dated December 22, 1998, • 3, 36-37. Furthermore, at the time of the UNE rate proceedings to which Qwest refers, Qwest's financial results were in question, and Qwest could not verify the accuracy of its reported ARMIS data. In any event, even if embedded expenses could be a suitable surrogate for forward-looking costs (and they cannot), Qwest calculated its "fractions" by using the embedded expenses for its entire network as the denominator. These expenses are overinclusive, because they improperly encompass (1) expenses attributable to its retail operations, contrary to the Commission's regulations (see 47 C.F.R. § 505(d)(2)), and (2) the expenses for all of the UNEs that Qwest provides- in contrast to (continued . . .)

Qwest's "empirical evidence" is likewise valueless. Qwest at 49. As Mr. Klick explains, Qwest's study is statistically meaningless because it failed to undertake the type of comprehensive, granular correlation analysis necessary to test whether the relationship between investment and expense per line has, in fact, changed. Klick Reply Decl. •• 77-79. Thus, for example, Qwest failed to control for relevant macroeconomic variables, such as population and economic growth factors, and other factors that vary geographically. *Id.* • 79. On the other hand, employing a rigorous and granular analysis of the relationship between expense and investment. AT&T witnesses have demonstrated that there is a strong correlation between expense and investment, and that expense-to-investment ratios are a valid mechanism for depicting this correlation. *Id.* • • 80-81.

2. ACFs Do Not Understate Certain Types Of Expenses.

In addition to their general claim that the Commission should use embedded expenses, Qwest and SBC claim that the Commission should limit state discretion with respect to certain specific expenses: General Support Assets ("GSA") expenses, product management and sales, and the shared cost allocator. None of these claims has merit.

GSA Expenses. In yet another attempt to get the Commission to resolve specific claims that Qwest is currently pursuing in federal district court, Qwest argues that the Minnesota commission has incorrectly calculated is GSA expenses. Qwest at 50-51. This claim is

⁽continued)

the CLEC cost studies criticized by Qwest, which calculated forward-looking expenses only for those UNEs that were actually at issue in the particular cost proceeding. See Utah PSC Docket No. 02-049-85, Transcript of Proceedings held January 10, 2003, at 847-848 (testimony of Douglas Denny) ("For example, unlike Qwest's cost model, the CLECs" cost model in the Qwest region did not calculate the expenses associated with non-recurring costs, collocations, or many of the more than 100 other elements on Owest's wholesale price list.")

completely baseless, and in all events is certainly no basis for modifying the Commission's TELRIC rules.

The Commission's rules properly forbid state commissions from adopting UNE rates that include any GSA expenses that support *retail* operations, because CLECs do not have access to Qwest's retail capabilities.³⁵ Rather, CLECs access only the network itself and employ their own customer service representatives and provide them with any necessary desks, computers and ears.

Because Qwest and other incumbents have long been monopoly providers of local telephone services, their GSA expenses, as reported to the Commission, are generally the only publicly available data regarding GSA expenses for local telephone companies. Accordingly, the Minnesota commission, like state commissions nationwide, relied on Qwest's publicly reported GSA expenses as a *starting point* for estimating the forward-looking GSA expenses of an efficient carrier. *MN Final Decision* • 65. Qwest's reported data, however, could serve only as a starting point, because Qwest's reported GSA expenses include *all* of its GSA costs, including those related solely to Qwest's retail operations • e.g., the cars, desks and computers that Qwest's retail customer services representatives use. The Minnesota commission therefore removed retail-only costs from Qwest's reported aggregate figures. But even embedded GSA costs (excluding retail-only costs) are not the proper measure. The Minnesota commission could not merely assume that Qwest's GSA costs, which reflect that Qwest has historically faced little competitive pressure to be efficient and cut costs, are those that an efficient carrier would incur today. *Local Competition Order* • 704-711. Accordingly, the Minnesota commission adjusted the GSA figure so that it represented the GSA costs that an efficient forward-looking carrier

³⁵ See 47 C.F.R. § 51.505(e)(2)(i) ("The sum of the allocation of forward-looking common costs for all elements and services shall equal the total forward-looking common costs, exclusive of retail costs") (emphasis added); 47 C.F.R. § 51.505(d)(2).

would incur. MN Final Order • 65. Because the efficient forward-looking direct network costs are lower than Qwest's bloated book costs, this standard process produced an appropriately reduced and efficient forward-looking wholesale GSA cost estimate. Id.

Qwest is wrong in contending that an adjustment to its reported GSA costs to remove retail-only costs was unnecessary because those costs are automatically removed when the perunit UNE prices are calculated by spreading costs over all units of demand, including the portion served by the ILEC's retail operations. See Qwest at 51 n.124. The calculation of per-unit UNE costs is intended to ensure that purchasers of UNEs pay only that portion of the costs of the wholesale network, including GSA costs needed to provide wholesale services, that they in fact use. Calculation of per-unit UNE costs does not allocate an "appropriate share" of Qwest's GSA costs between Qwest and CLECs, as Qwest claims. See id. To the contrary, because Qwest must bear 100% of the retail-only GSA costs, those costs must be stripped out before the purely wholesale costs (including GSA) are allocated among users of the wholesale network. Failing to remove retail-only costs from the GSA cost before spreading those costs across all lines would have required CLECs to bear a portion of these retail-only expenses, in direct violation of the Commission's TELRIC rules.

Product Management and Sales Expenses. Equally baseless is Qwest's claim (at 52-53) that CLEC cost models exclude some of Qwest's relevant product management and sales expenses. The HAI model includes costs for service order processing, payment and collections, billing inquiry and billing systems.³⁶ There is no basis for including what Qwest calls its

³⁶ See Utah Tr. at 851 (testimony of AT&T's witness Denny). Indeed, Qwest has not disputed in State proceedings that the total of all of the expense factors in its own "ICM" cost model, which includes a factor for product management and sales, is roughly equal to the total of all of the expense factors in the HAI model.

expenses "associated with product management and certain other wholesale functions" (which, in state proceedings, Qwest has described as "product management and sales" expenses).³⁷

Qwest has yet to demonstrate that its product management and sales expenses are attributable to providing UNEs and interconnection to CLECs, much less quantified such costs. Such costs, as recorded in Qwest's ARMIS accounts, are "for all wholesale *and retail* product management and sales." As the Utah commission has stated, many of these costs "are either joint with areas of [Qwest] that are not related to wholesale activities, or are only joint with specific wholesale portions of [Qwest]." The Utah commission has properly found that the HAI model's approach to excluding these costs is "a reasonable attempt to remove the costs that are joint to other areas of Qwest's operations, but are not joint to all wholesale activities or are not common to Qwest as a whole."

Qwest has never made any effort to prove the nature and amount of its product management and sales expenses, or their relationship to its wholesale activities. Moreover, Qwest has made no attempt to show that its proposed product management and sales expenses are those that an efficient carrier would incur. And Qwest's proposed expenses for "product management" and "sales" would include, for example, Qwest's costs of developing products that

³⁷ See Qwest at 52-53; Direct Testimony of D.M. (Marti) Gude on Behalf of Qwest Corporation in Washington UTC Docket No. UT-023003, In the Matter of the Review of: Unbundled Loop and Switching Rates; the Deaveraged Zone Rate Zone Structure; and Unbundled Network Elements, Transport, and Termination, filed June 26, 2003, at 7, 16, 19 (describing "product management and sales" expenses as part of "marketing costs").

³⁸ Utah Tr. at 869 (Qwest's witness Gude) (emphasis added).

³⁹ Utah Erratum Report at 8.

⁴⁰ Id. See also Utah Report at 14.

⁴¹ See Utah Tr. at 876 (testimony of Qwest's witness Gude) (providing list of functions provided by Qwest's product managers, but admitting lack of personal knowledge of what those functions entail or the extent to which product managers actually perform these functions).

⁴² Qwest has admitted that it has not conducted a reasonableness review of these expenses. Utah Tr. at 865 (testimony of Qwest's witness Gude).

Qwest developed but decided not to offer to CLECs and other services for which CLECs gain no benefit.⁴³

Shared Cost Allocator. SBC too takes a stab at trying to gain Commission blessing of one of its current litigating positions—the proper treatment of "shared costs," which SBC describes as activities associated with wholesale marketing and uncollectibles. See SBC at 77. In the Ameritech region, SBC has used a "shared cost allocator" in its cost models. The purpose of this allocator is ostensibly to develop a cost factor to determine what percentage of SBC's "shared costs" should be recovered from UNE purchasers. To compute the allocator. SBC divides its "wholesale marketing costs" and "wholesale uncollectibles costs" by "wholesale direct costs" (which consist of a portion of the total forward-looking direct costs computed by SBC). See SBC at 77.

As SBC notes. CLECs in the region have advocated changing the factor to include wholesale revenues (rather than wholesale direct costs) in the denominator: SBC asks the Commission to "clarify" that such an adjustment would be internally inconsistent. SBC at 77. The Commission need not amend its rules or take any other action to referee this sort of state-specific dispute; the issue arises from the nature of rate cases in the Ameritech region, where SBC is the only party that submits a cost model. Where conceptual or other errors are identified in SBC's models, CLECs, who have limited information, suggest the most workable or practical fix based on the data available to them.

This is such a case, because SBC's proposed "shared cost allocator" is itself internally inconsistent and riddled with flaws. For one thing, SBC defines "the wholesale services" that it uses to attribute shared costs to its UNEs far too broadly. SBC includes within "wholesale

⁴³ See Cross-Examination Exhibit 14 in Utah PSC Docket No. 01-049-85, supra (describing numerous USOCs that Qwest's product managers decided not to offer with the UNE platform to CLECs).

marketing services" such products as switched and special access, compensation with independent exchange carriers, and services to payphone providers - none of which have anything to do with UNEs. Second, the "total wholesale direct costs" used by SBC in its cost study were too unreliable to be used as the denominator of the allocator, because the analysis used to derive those costs was filled with obvious errors. Indeed, SBC's entire approach of calculating the allocator was internally inconsistent, because SBC used *embedded* data in the numerator, and "forward-looking" data in the denominator. Starkey/Fischer Testimony at 96.

In response, CLECs suggested the most practical fix available. CLECs adjusted the wholesale marketing costs in the numerator of the shared cost allocator to define expenses attributable to UNEs with more specificity than SBC's broader "wholesale services" approach. As a result. SBC's total wholesale direct costs could no longer be used as the denominator of the allocator, 45 and so CLECs suggested the use of UNE-specific revenues instead. Both marketing expenses and uncollectibles are more causally related to revenues than to direct costs. 46 Moreover, using data on UNE-specific revenues - which SBC had already provided in discovery was preferable to recomputing wholesale direct costs, which would have required assumptions

⁴⁴ Sec Initial Testimony of Michael Starkey and Warren Fischer filed January 20, 2004, in Michigan PSC Case No. U-13531, *The Commission's own Motion to Review the Costs of Telecommunications Services provided by SBC Michigan*, at 96 ("Starkey/Fischer Testimony"). For example, SBC included both regulated and non-regulated data in its common cost numerator and its direct cost denominator; included its non-cash transitional benefit obligations as an "expense": failed to reduce its expenses to reflect credits from pension settlements; and failed to account for merger-related savings. *Id.* at 45-69.

⁴⁵ See Starkey/Fischer Testimony at 72-82. Before using this ratio in calculating UNE shared costs, the CLECs removed all costs specific to product advertising, because SBC does not advertise or perform any other activities intended to stimulate the purchase of UNEs. *Id.* at 75-80.

⁴⁶ *Id.* at 97-98. For example, the amount of uncollectibles is likely to vary relative to the amounts of SBC's revenues, and less likely to fluctuate with SBC's costs of producing services. Furthermore, the higher the revenues (and profits) generated by a product, the more likely it is that SBC will increase its marketing costs to stimulate demand for that product. *Id.*

regarding demand (existing and future) that would have been contentious and of questionable validity.⁴⁷

H. Rate Deaveraging.

There is no question that the Commission must continue to require states to implement geographic deaveraging of UNE rates. Competitive entry into local telephone markets is critically dependent on ensuring that the costs incurred by competitors—i.e., the UNE rates charged by incumbents—mimic the incumbents' forward-looking costs. Willig Decl. •• 145-48. Because these costs vary significantly by population density, averaged UNE rates could only discourage efficient facility investment, encourage inefficient arbitrage, and deny many consumers any opportunity for competitive choice. *Id.*⁴⁸

Contrary to BellSouth's claims, NERA (BellSouth) Decl. •• 113-114, geographic deaveraging is appropriate even where states have not implemented retail rate deaveraging. Whether a state has implemented retail rate deaveraging has no impact whatsoever on the cost economics that are the touchstone for geographic UNE rate deaveraging. Willig Decl. • 146. The relevant economic issue is whether the UNE rates that CLECs must pay mirror the costs of

There is also no basis for SBC's criticism of the decisions of some State commissions to use total company-wide direct costs (both wholesale and retail) as the denominator of the shared cost allocator. See SBC at 77 n.109. In the decision cited by SBC, the Wisconsin commission placed certain "competition implementation costs" into a shared retail/wholesale account, which resulted in the sharing of such costs both by SBC's wholesale products and its retail customers. These costs included the costs of implementing this Commission's rules, negotiations and arbitrations conducted pursuant to section 252, litigating disputes regarding interconnection agreements, and litigating proceedings regarding TELRIC rates. The Wisconsin commission explained that these types of costs should be shared because they were incurred in connection with the opening of the local exchange market to competition, which benefits both retail and wholesale customers of local exchange service. See Wisconsin UNE Order at 30-34.

⁴⁸ For this reason, the Commission should reject Qwest's proposal (at 61) to consider non-cost implications of deaveraging, *i.e.*, "marketing and operating limitations," when deaveraging by geographic area. Likewise, as long as the state commission deaverages based on cost differences, there is no legitimate basis for the Commission to adopt Qwest's proposal (at 61) to arbitrarily limit the number of UNE zones that a particular state may adopt.

the incumbent. *Id.* If the incumbent enjoys a cost advantage in any geographic area, competitive entry will not be economically viable in that area, regardless of whether retail rates are deaveraged. *Id.* The incumbent always will be able to charge a lower retail price to the end-user as a result of the incumbent's lower costs, regardless of the retail rate structure adopted by state commissions. *Id.*

Likewise, there is no merit to the Bells' claim that geographic deaveraging of UNE rates undermines state subsidy mechanisms. According to the incumbents, some states permit incumbents to charge higher rates in urban areas, to subsidize lower rates in higher-cost rural areas, where they are required to provide service. As a result, these incumbents argue, geographic UNE rate deaveraging permits competitors to enter only in the urban areas, and to charge lower rates than the incumbents, thereby requiring the incumbents to respond by charging rates in urban areas that match those of the competitors. NERA Decl. (BellSouth) •• 113-114. This reduction in urban revenues, the incumbents assert, is unfair and undermines their ability to use urban revenues to cross-subsidize lower retail rates in rural areas. Id. The problems with this argument are that it (1) presumes (without proof) that urban rates do subsidize rural rates and (2) holds the development of effective local telephone competition hostage to state policies of maintaining uneconomic implicit rate subsidies. See, e.g., Texas PUC v. FCC, 183 F.3d 393. 424-425 (5th Cir. 1999); Alenco Communications v. FCC, 201 F.3d 608, 622-623 (5th Cir. 2000). And that is precisely why the Act forbids the Commission from adopting implicit subsidies to fund universal service. 47 U.S.C. § 254(e). To the extent that a state requires an ILEC to maintain a non-cost-based geographic retail rate structure, the ILEC's appropriate remedy is to seek explicit subsidy funding, not to distort its UNE rates.

1. Non-Recurring Charges

As the *Notice* recognizes, non-recurring charges ("NRCs") "can be a serious barrier to entry," because they "constitute an upfront cost to the competitive LEC that is generally not recoverable if it subsequently loses the end-user customer served with the UNE." *Notice* • 114. *See also Virginia Arbitration Order* • 555: *Local Competition Order* • 745. Accordingly, it is exceedingly important that the Commission's TELRIC rules confine NRCs to the minimum appropriate levels that reflect only non-reusable "upfront" costs that an efficient network provider employing cost-minimizing mechanized processes and technologies would actually incur to provision UNEs. This is an area in which the TELRIC rules have long needed clarification. The Bells have since 1996 attempted to use ambiguities in the existing rules to impose competition-foreclosing NRCs that bear no relation to efficient forward-looking charges, and the Commission has yet to act on the reconsideration petitions filed nearly eight years ago to close off perceived loopholes. The Bells now urge the Commission to make matters worse by undoing state commission efforts to cabin NRCs to reasonable levels and requiring NRCs to be calculated in direct violation of the most basic principles of forward-looking economic cost-based pricing.

In particular, the Bells urge the Commission to require that NRCs be based on their actual "out-of-pocket" costs, rather than on forward-looking costs that reflect the least-cost, most efficient technology. BellSouth at 46; Qwest at 55; SBC at 79-80; Verizon at vii, 77. For the same reasons discussed herein and in AT&T's opening comments in connection with recurring costs, the Commission should reject the Bells' "actual cost" standard and continue to require that NRCs be determined by reference to the processes that an efficient competitor, using the least-cost, most efficient available technology would employ. *See* AT&T at 104; Murray Decl. •• 20, 22, 126, 136, 184, 191-92; Murray Reply Decl. •• 66-81.

The Bells argue that their "actual cost" standard is appropriate because their non-recurring costs already *are* efficient, due to their strong incentives to reduce their non-recurring costs as much as possible. *See*; BellSouth at 47; SBC at 82; Verizon at 79-81.⁴⁹ But ILEC cost studies can, and do, reflect inefficient practices even when the ILECs themselves strive to contain their non-recurring costs. The evidence is clear that the ILECs' networks are replete with inefficient non-recurring practices that would be absent in an efficient, forward-looking network. *See* AT&T at 106; Murray Decl. •• 180-181. Given these inefficiencies, the ILECs' argument amounts to the assertion that they have "incentives" to do the best they can with their current networks. Even if that is the case, such incentives are insufficient to drive costs down to forward-looking levels. Murray Reply Decl. •• 73-74.

Also, in the "real world" that they repeatedly cite, the ILECs have every reason to be *inefficient* in performing non-recurring activities on behalf of CLECs in both cost and performance—because the CLECs are their competitors. Using inefficient practices enables the ILECs to continue their monopoly by inflating their costs (and thus the prices that they charge to CLECs) while providing CLECs with inadequate service. AT&T at 106; Murray Decl. •• 124-133; Murray Reply Decl. • 80 n.94.

The error in the Bells' "incentive" argument made clear by an examination of the various "incentives" that they cite. *See id.* •• 74-79. For example, the Bells argue that they have incentives to be efficient because: (1) most of the non-recurring activities that they perform for

⁴⁹ Qwest asserts that any concerns about the ILEC's incentives to be efficient "are addressed by the possibility of adjustments based on actual marketplace evidence of known and measurable efficiencies achieved by other carriers." Qwest at 55. But Qwest's assertion amounts to an admission that the ILECs' current networks are *not* efficient—and that the specific "incentives" cited by the other ILECs have been ineffective. In any event, Qwest provides no description on when or how the purported "adjustments" would be made, what "efficiencies achieved by other carriers" would be included in the adjustment, or what criteria would be used to determine whether the efficiencies were "measurable."

CLECs are similar to those performed in their retail operations; (2) price caps and competition give the ILECs a strong incentive to be efficient; (3) non-recurring tasks performed exclusively for CLECs have typically been developed in State collaborative proceedings; (4) the various performance measurements and service quality standards (including the penalties that ILECs must pay for failure to meet the applicable benchmarks) give ILECs an incentive to maximize efficiency; and (5) because the NRCs prescribed by state commissions are "low," it would be counterproductive for ILECs to utilize costly, inefficient processes that would increase their costs without any corresponding increase in revenues. See Verizon at 79-81; SBC at 82; BellSouth at 47. Each of these "incentives," however, is illusory.

That ILECs perform some of the same non-recurring tasks for retail and wholesale customers gives them no incentive to be efficient. *See* Verizon at 79. Many of the non-recurring activities performed by ILECs for CLECs, particularly those involving UNE loops, have no retail analog. Murray Decl. • 261.⁵⁰ Even where retail analogs exist, many of the retail NRCs for those activities do not reflect forward-looking costs. *Id.* • 262-263.

Nor do price caps and competition give ILECs sufficient incentive to be efficient. As previously discussed, price caps can give ILECs an incentive to be *inefficient*. See Murray Decl. 185-186; Murray Reply Decl. 76; Selwyn Decl. 12-28. And competition is too insignificant to give the ILECs any presumption of efficiency. Willig Reply Decl. 50.

⁵⁰ In the case of non-recurring activities involving UNE loops, the ILECs have every incentive to be *inefficient*, not only because there are no retail analogs to such activities but also because the non-recurring performance in connection with UNE loops for CLECs using their own switching are more extensive (and thus more costly) that those involving the UNE platform. That incentive to be inefficient will only increase if the ILECs succeed in their goal of denying CLECs the ability to order the UNE platform, which more closely resembles the service that the ILECs provide to their own retail customers. Murray Reply Deel. • 79.

The Bells' reliance on the development of non-recurring tasks in "collaborative proceedings" is wholly misplaced. See Verizon at 80-81; BellSouth at 47. At most, those proceedings primarily involved the adequacy of certain specific tasks performed by the ILECs for purposes of Section 271 applications—not the determination of the specific efficient task times or the frequencies with which the tasks would need to be performed. The latter two elements are critical components of a non-recurring cost study. Murray Reply Decl. • 77. Similarly, the performance metrics and penalties cited by the Bells provide no incentive to increase their efficiency, because the metrics and penalties are based on the ILEC's actual tasks and task times in their current networks— not on those of an efficient carrier in a forward-looking network. Id. • 78. And even then, the Bells have incurred enormous penalties for failure to meet performance standards (and at least one ILEC, SBC, is attempting to recover those penalties from the CLECs through a mark-up on UNEs). Id.

The current levels of NRCs similarly do not give ILECs "every reason to make their wholesale operations the lowest cost possible." *See* Verizon at 80-81. If, as the Bells allege, there are "bizarre" discrepancies between NRCs prescribed by States for the same activity (e.g., SBC at 80). ILECs will have no incentive to be efficient in states where the NRCs exceed forward-looking costs. ⁵¹

Finally, the ILECs' arguments that they have sufficient incentives to be efficient are belied by their defense of their current *inefficient* activities, such as manual processing and loop conditioning, in this proceeding. *See* Qwest at 23-24; Verizon at 88; BellSouth at 49-50; Murray

In arguing that an ILEC would not have an incentive to "suddenly start acting inefficiently" when a State commission is about to launch a proceeding to establish UNE rates, Verizon is simply setting up a straw man. See Shelanski (Verizon) Decl. • 59. An ILEC has an incentive to be inefficient at *any* time, as long as it can use those inefficiencies to inflate NRCs and impede competition. Murray Decl. • 80 n.94.

Decl. • 181. Although Qwest attacks CLECs and State commissions for adopting flow-through rates that "assume away" faxed orders and assume "fully automated systems that exist only in the imaginations of the CLECs' advocate-directed consultants," the Arizona commission correctly found that such criticisms "fail to recognize efficiencies that would likely be realized with a fully mechanized OSS system." As discussed below, the ILECs' current practice of loop conditioning would be unnecessary if they had implemented industry guidelines established decades ago. If the ILECs have declined to end these patently inefficient activities even under the current TELRIC standard, they will have even less reason to do so under the "actual cost" standard that they advocate here. 53

The "Reusability" Principle. The Commission should also limit recovery through NRCs to those costs that "exclusively benefit the competitive LEC ordering the UNE." See Notice • 121: AT&T at 111-113. If a facility can be used by subsequent carriers (including the ILEC itself) or for later orders without change, the costs associated with that facility should be

See Arizona UNE Order at 68-69; Qwest at 23-24; Murray Decl. •• 196-202. The Arizona commission singled out by Qwest is but one of several State commissions that have agreed with the CLECs that in an efficient, forward-looking network, the rate of manual fallout attributable to CLEC errors or omissions should be only 2 percent. See Virginia Arbitration Order • 592 & n.1524 (adopting CLECs' proposed 2 percent rate for CLEC-caused manual fallout and noting that "several state commissions" have adopted the same rate). Similarly, although Verizon claims that it has not automated certain tasks that it performs exclusively for CLECs because they are "performed infrequently," "complex," or "simply cannot be automated," it provides no data or details that either support its contention or call into question the 2 percent CLEC-caused fallout rate approved in the Virginia Arbitration Order. See Verizon at 80.

Contrary to the Bells' assertion, their "actual cost" standard would not make the rate-setting process more predictable and less subject to speculation than the current TELRIC standard. Sec, e.g., Verizon at 81; SBC at 80. Experience has already shown that the ILECs lack data on their "real-world" practices, particularly at the level of detail needed to establish NRCs. Murray Reply Decl. •• 67-72. Even if such data somehow became available, the use of a "real-world" approach would require state commissions to resolve conflicting testimony by subject matter experts on a wide range of issues, including the adequacy of time and motion studies and the reasonableness of the ILEC's practices. See AT&T at 105; Murray Decl. •• 160-171, 178

treated as a recurring charge, because they benefit later users.⁵⁴ This approach allows the ILEC the opportunity for full recovery of its total forward-looking costs, prevents double recovery of the costs of non-recurring activities, and ensures that the costs of a reusable activity are not unfairly imposed entirely on the first user of that activity. *See* AT&T at 110-113; Murray Reply Decl. •• 11, 83.

The Bells, by contrast, argue that they should be allowed to recover the costs of *any* one-time activity "up front" from the CLEC that originally ordered the activity, regardless of whether the activity is reusable. Verizon at vii, 81-85; SBC at 83-88; BellSouth at 47; Qwest at 56. The Bells claim that their proposal is necessary to ensure that costs are recovered in the manner in which they are incurred, consistent with principles of cost causation. In fact, only the reusability test satisfies this standard. Murray Reply Decl. •• 11, 82-83.

The reusability test recognizes that the costs of any activity which produce a reusable asset (such as a loop that is connected end-to-end from the customer's premises to the central office or a "conditioned" loop) should be recovered as recurring costs – and that only the costs of non-reusable activities are appropriately charged up-front. By authorizing a NRC for the costs of any one-time activity, the Bells' approach, by contrast, would lead to double recovery, unfairness, and anticompetitive results that the reusability test is designed to prevent. *See* Murray Decl. • 246, 253; Murray Reply Decl. • 83, 90.55

⁵⁴ Under the reusability test, the ILEC itself can be a subsequent user that benefits from a facility that the ILEC originally installed for a CLEC. For example, if the ILEC provides and connects a loop for a CLEC, the ILEC will be a subsequent user (and beneficiary) of the loop if it wins back the customer, and the costs that were incurred in creating the reusable facility (such as a cross-connect at the FDI) would be treated as a recurring cost. Murray Reply Decl. § 83 n.98.

⁵⁵See Local Competition Order ¶ 751 (requiring state commissions to "ensure that nonrecurring charges imposed by incumbent LECs are equitably allocated among entrants where such charges are imposed on one entrant for the use of an asset and another entrant uses the asset after the first entrant abandons the asset"). One Commission decision on which Verizon and SBC rely (SBC at 88 n.123; Verizon at 83 n.121) recognized the "reusability" standard in the context of (continued . . .)

The Bells' criticisms of the reusability test border on the frivolous. The Bells' principal arguments - including their claim that the reusability test would cause them to be the CLECs' "banker," to "subsidize" CLECs, or to face a substantial risk of nonrecovery (see BellSouth at 47; SBC at 85-86; Verizon at 77, 81-84)—are based on a strawman. See Murray Reply Deel. ¶85. The reusability test would simply require that particular costs be recovered through recurring charges if they create an asset that has enduring value and can be re-used by subsequent carriers. Id. Contrary to the ILECs' suggestion, it does not shift true nonrecurring costs to recurring charges or prevent ILECs from fully recovering their forward-looking costs. Instead, it only requires an ILEC to recover costs that create a reusable asset through recurring charges. Id. •• 11-12, 85. That is not a subsidy. Id.

There is no merit in the Bells' assertions that allowing them to recover the one-time costs of reusable activities through recurring costs is necessary to avoid violating "competitive neutrality." *See* Qwest at 56-57; SBC at 86-87; Verizon at 81-82. If costs are attributable to more than one carrier, those costs should be borne equally by all carriers that could have "caused" the cost by ordering the activity. Such an approach is competitively neutral, and there is no subsidy. Murray Reply Deel. • 84. The Bells' approach, by contrast, would impose the entire costs of a reusable activity on the ordering CLEC, while giving subsequent users a free ride. Murray Deel. • 250; Murray Reply Deel. • 84.

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collocation, by ordering LECs to make refunds in situations where the LEC imposed recurring charges on an initial interconnector to recover common physical collocation construction costs in a central office when at least one subsequent interconnector takes service in that central office and uses those same assets. See Expanded Interconnection Order • 50.

Although SBC asserts that the reusability test would require CLECs that manage to keep customers for longer-than-usual periods to subsidize CLECs with greater customer churn (SBC at 86), that result could only occurs if an ILEC could insist on collecting disconnection costs from a CLEC at the time of installation and discount them to reflect the time value of money. See Murray Decl. • 275; Murray Reply Decl. • 94.

The Bells are equally off-base in attempting to defend their approach as a necessary incentive to CLECs to avoid ordering "unnecessary" one-time activities or making "inefficient" entry decisions. See, e.g., Verizon at 79; BellSouth NERA Decl. • 105. CLECs have no reason to order services that they do not need. Murray Reply Decl. • 89; Riolo Reply Decl. • 87-88. Moreover, the example of an "inefficient entry decision" cited by Verizon is a CLEC's decision to use a UNE loop to provide DSL service. Verizon at 79. The Commission's Triennial Review Order (• 258), however, has determined that such a decision is economically efficient. By contrast, allowing the ILECs to collect NRCs up-front for the costs of reusable activities would not only act as a barrier to entry, but reduce the ILEC's incentive to develop more efficient processes. Murray Decl. AT&T at 113; Murray Reply Decl. • 79, 90. 57

The Bells' professed fears of the risks of nonrecovery are also implausible. Significantly, the Bells do not contend that they have *actually* experienced such problems since the 1996 Act was passed, even though the *Local Competition Order* authorized state commissions to require ILECs to collect non-recurring costs through recurring charges, which involves all of the risks associated with the reusability test—and more.⁵⁸ To the contrary, the ILECs have frequently

Verizon argues that the reusability test is improper because "it is equally possible that a CLEC will benefit from a non-recurring task the ILEC performed for its customer." Verizon at 84. Although the one example of such a task that Verizon cites—loop conditioning—is an activity for which the ILEC should assess *no* charge to customers, whether retail or wholesale, *see id.*; AT&T at 116-119, the reusability test is entirely proper because its application will ensure that the CLEC does help to pay for the forward-looking cost of a network that does not require loop conditioning.

Verizon argues that even leaving aside the issue of the risk of nonrecovery, it is "unlikely that the ILEC could fully recover its non-recurring costs through recurring rates," because "such charges would have to be spread across an *estimate* of some measure of forward-looking usage over time" — which would require accurate forecasts of the number of CLECs who will use the facilities in question, the average length of time the CLECs will use the facilities, and the selection of the number of years over which to recover and amortize the expense. Verizon at 84. (emphasis in original). This argument, like many of Verizon's other arguments, is based on the erroneous premise that collections for non-recurring costs that generate non-recurring benefits would be shifted to recurring charges under the reusability test. Verizon's argument is also (continued . . .)

been willing to waive collection of non-recurring charges for their retail customers (in cases of customer winbacks, for example). Murray Reply Decl. • 87. In the wholesale market, where many of the CLECs are large corporations and have every incentive to pay their bills in order to continue service, the possibility of nonrecovery is remote, notwithstanding the ILECs' purported concerns about "churn" and CLEC bankruptcies. And even if the ILEC does not fully recover the costs of a reusable activity through recurring charges to the initial CLEC, it will have every opportunity to recover those costs from subsequent users of the same facility. See Murray Decl. • 268; Murray Reply Decl. • 86.⁵⁹

Moreover, it is utter nonsense for multi-billion-dollar ILECs such as Verizon and BellSouth to suggest that the risk of such nonrecovery would threaten their financial viability – and thus entitle them to the protection of a "risk premium." Indeed, the rationalization of these ILECs that CLECs can simply obtain third-party financing if they find it difficult to pay the costs

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flawed because it ignores the fact that the forecasts that are actually required (such as the forecasted economic life of the facility and the demand for the facility) are common to all recurring cost calculations. Murray Repfy Decl. • 87 n.101.

⁵⁹ Verizon and SBC repeatedly cite (Verizon at 77 n.117, 82 n.120, 83 n.121; SBC at 84 n.114, 86 n.119) the Commission's 1987 *Non-Recurring Charges Order* as supportive of their view of appropriate TELRIC principles, but that decision was made more than nine years before the Commission promulgated its TELRIC rules in the *Local Competition Order*.

⁶⁰ See Verizon at 85 (arguing that "recurring rates would have to include an additional risk premium to compensate for the added financial risk" of underrecovery if ILECs were required to recover non-recurring costs through recurring rates); BellSouth at 47 n.41; NERA (BellSouth) Decl. • 105 (arguing that "the failure to provide 'just-in-time' compensation to an ILEC could interfere with the ILEC's own viability as a business and its plans for long-term investment," and therefore would require a "return component in the cost calculation to compensate the incumbent for the added financial risk that it faces"). *Cf.* AT&T at 31 (describing Verizon's recent announcement of a multi-billion-dollar fiber-optic investment initiative that rivals in scale "the construction of the Roman aqueducts"); Murray Reply Decl. • • 85-86.

of one-time activities "up front," Verizon at 83, is not only incorrect as an practical matter, but smacks of sheer arrogance. *See, e.g.*, Murray Reply Decl. • 64.⁶¹

Finally, the Bells' assertion that the reusability test would lead to substantial increases in recurring charges is unaccompanied by any supporting basis. See Verizon at 85; SBC at 85. Only in a very few instances (if any) would the reusability test result in transferring existing NRCs to recurring charges, and only if the costs are currently misclassified as non-recurring costs. Instead, the reusability test would eliminate the double-counting of costs. Moreover, the costs of activities that create reusable assets may already be included in recurring charges, or may be unnecessary in a forward-looking network. Thus, it is highly unlikely that application of the test would materially affect current levels of recurring charges. Murray Reply Deel. • 88.

For these reasons, the Commission should allow the assessment of NRCs only to recover the costs of activities that exclusively benefit the ordering CLEC, and should require ILECs to recover through recurring charges the costs of any one-time activity that can, or does, benefit subsequent users.

Disconnect Charges. As AT&T explained in its opening comments, disconnect charges should be assessed only when the CLEC actually cancels service *and* the facilities in question will actually be disconnected. An ILEC plainly does not incur the costs of disconnection unless and until the facility is actually disconnected. Allowing the ILEC to assess disconnection charges at the time of installation and without regard to whether the facilities will actually be disconnected would therefore violate principles of cost causation, require CLECs to pay for costs

SBC opposes the adoption of a refund mechanism even if a non-recurring activity benefits subsequent carriers over time, on the ground that an ILEC itself incurs such costs without the availability of a refund mechanism when it performs activities, such as cross-connects, for retail customers. SBC at 88. But SBC's argument suggests again suggests that these costs are, and should be, recovered from recurring charges (which an ILEC can recover from each user over the asset's economic life). Murray Reply Decl. ¶ 91 n.104.

that the ILEC has not incurred (and may never incur), and erect entirely artificial barriers to entry. AT&T at 114-116.

The Bells' opening comments only confirm that the Commission should clarify that (i) disconnect charges may never be imposed when a CLEC orders service and (ii) may be imposed when a CLEC customer discontinues service only if the ILEC will actually disconnect the facilities used to provide service to that customer. Qwest, for example, acknowledges that facilities often are not physically disconnected when a customer terminates service provided by a CLEC.⁶² And BellSouth *agrees* that "a rate structure for UNEs where these costs are recovered at the time of disconnect is acceptable." BellSouth at 48-49.

Only Verizon continues to insist that the Commission should nonetheless allow ILECs to assess disconnect charges when a CLEC places a UNE order. *See* Verizon at 86-87. None of their proffered arguments can support this outlier position. Verizon contends (at 86) that assessing disconnection charges at the time of ordering is necessary to "shift[] the risk of non-recovery to CLECs," but there is, in reality, no such "risk" to shift given that, as other Bells concede, the facilities generally are not actually disconnected. Murray Reply Decl. • 93. And Verizon's historical practice of choosing to collect disconnect charges up-front from its captive *retail* customers is obviously of no moment. To justify assessing such charges on CLECs. Verizon would have to prove that it actually incurs disconnect charges in connection with every UNE order and that it could not recover those costs at the time of disconnection. Verizon does not even seriously attempt to do so. The vast majority of UNE orders, including the few (if any) orders that trigger actual facilities disconnection when the customer terminates service, are placed by "repeat play" carriers that pose no serious uncollectibles risk, and the Bells already

⁶² See Qwest at 41 (when customer premises connected to the network are unoccupied, "carriers keep the line connected to the switch—an efficient practice assumed by the CLECs' proposed NRCs").

recover any residual uncollectibles risk directly through the uncollectibles costs reflected in UNE cost models and UNE charges. *See Virginia Arbitration Order* • 598. There certainly is no legitimate basis for imposing up-front disconnect charges on *all* UNE purchasers to address a disconnect cost uncollectibles risk that Verizon has not even proven to exist.

Verizon's proposal to discount the disconnect costs for the time value of money obviously could not cure the clear impropriety of recovering such costs up-front. Verizon at 86-87. Although Verizon describes such a procedure as "relatively simple," id. at 87, it would, in fact, be extraordinarily complicated—as the *Notice* recognizes. See Notice 128; see also AT&T at 116; Murray Deel. 274; Murray Reply Deel. 94. And even if sufficient data were available to perform the calculation, it would not result in an equitable distribution of present value among CLECs. Instead, a uniform discounting approach would penalize competitors who retain customers longer than others (or that pay their bills). Id. Verizon itself, as well as SBC, recognize that such a result would not only be discriminatory against carriers with longer-term customers, but would impair the ability of such carriers to recover their costs. See SBC at 86 (CLECs with longer-term customers would be put at a "wholly irrational regulatory disadvantage" if they were forced to subsidize CLECs with far greater customer charn). For these reasons, the Commission should, as the Wireline Competition Bureau did in the Firginia Arbitration Order, require that any disconnect charges be recovered only at the time of actual disconnection. Virginia Arbitration Order 44 596-598.

Loop Conditioning Charges. ILECs should not be permitted to recover any costs associated with loop conditioning from CLECs, because such recovery is flatly inconsistent with forward-looking cost principles. An efficient, forward-looking network architecture would not deploy the load coils, excessive bridged taps, and repeaters that are removed in loop conditioning. The ILECs' current inefficient conditioning activities reflect their failure to

implement decades-old industry guidelines which call for a network architecture that would require the conditioning of few (if any) loops. AT&T at 117.

Verizon and BellSouth are therefore flatly wrong in urging the authorization of conditioning charges. *See* Verizon at 88; BellSouth at 49. Although Verizon appears to concede (at 88) that conditioning charges are inappropriate when the loop length is 18,000 feet or less, the recovery of such charges would be inappropriate even for loops of longer lengths, in view of the forward-looking cost assumptions in TELRIC that provide the ILEC with payment for a Digital Loop Carrier system whenever conditioning would otherwise be necessary. AT&T at 117. And BellSouth's own recurring cost studies properly reflect an outside plant network without any load coils or excessive bridged taps. *See* BellSouth at 49; Murray Decl. • 295; Murray Reply Decl. • 97.63

BellSouth's attempt to justify conditioning charges as a "financial incentive to judiciously request conditioning" makes no sense. *See* BellSouth at 49. No "incentive" would be necessary if the ILECs had implemented industry guidelines. Riolo Reply Deel. • 85. Furthermore, the notion that a CLEC would unnecessarily request loop conditioning is preposterous. *Id.* • 86-88. BellSouth's further argument that its voice grade network might be damaged absent such a "financial incentive" is contrary to the reality that loop conditioning can, and does, improve the quality of the ILEC's network. *Id.* • 89-91. AT&T agrees that loop conditioning charges should not be treated differently under the TELRIC methodology from other charges, *see* SBC at 82-83, but that means the Commission should require application of

⁶³ Loop conditioning charges cannot be based on a warped theory of cost causation—*i.e.*, that the CLEC, by ordering conditioning, causes the ILEC to incur the charges. *See* Verizon at 88; BellSouth at 49. Under proper principles of cost causation, it is the *ILECs* who caused the charges to be incurred, as a result of their failure to implement the applicable industry guidelines. *See* Riolo Deel. ¶ 146; Riolo Reply Deel. ¶ 89.

consistent forward-looking principles to recurring *and* non-recurring costs (and, thus, the disallowance of conditioning costs)—not, as SBC suggests (at 83), the use of the ILECs' current networks as the governing costing standard.

The Commission has increasingly recognized the inconsistency of loop conditioning charges with forward-looking cost principles and the pro-competitive goals of the 1996 Act. AT&T at 118-119. The Commission should therefore rule that ILECs may not assess a separate charge for loop conditioning. *Id.* at 121.

Qwest's Disagreement with its Minnesota NRCs. In a misguided effort to justify its proposed "actual cost" standard, Qwest argues that the current TELRIC standard has resulted in resulted in a NRC for "basic installation" that are well below economic costs. *See* Qwest at 13, 55. In particular, it attacks the NRCs set by the Minnesota commission, claiming that are less than those set by other state commissions. The Minnesota commission properly applied TELRIC principles and rejected the bloated NRC charges proposed by Qwest.

As the Minnesota commission recognized, the over \$200 "basic installation" charge advocated by Qwest was absurd on its face and the produced by cost studies containing numerous TELRIC errors. MN Final Order •• 158-59. These errors included: (1) the improper recovery of disconnect costs at the time when a loop is initially provisioned, and costs of service order processing for both connecting and disconnecting the loop; (2) recovery of costs for manual work activities that would be performed electronically in a forward-looking network; (3) recovery of costs for activities (such as the participation of two separate work groups in testing activities) that are unnecessary in a forward-looking network; (4) reliance on improperly computed, and overstated, time estimates for various work activities; (5) recovery of nonrecurring costs that should be recovered through recurring rates; (6) allocations of network related costs that are not properly attributable to non-recurring charges; and (7) the assumption

that a CLEC submits a separate order for each loop that it is requesting. Thus, the Minnesota commission properly relied upon the cost studies submitted by AT&T and MCI, which were based on the efficient costs of providing the services at issue.

To be sure, other state commissions in the Qwest region have adopted NRCs that are higher than the Minnesota commission. But these differences do not reflect any theoretical deficiency in the TELRIC standard. Rather, they support AT&T's point that the Commission should adopt the above-discussed clarifications of the application of the TELRIC rules in the NRC context and put an end to the Bells' attempts to exploit ambiguities in the existing rules to impose competition-foreclosing NRCs that bear no relation to efficient forward-looking charges.